GALLINGER (J. H.)

National Sanitarium for the Treatment of Pulmonary Diseases.

REMARKS

OF

HON. JACOB H. GALLINGER,

OF NEW HAMPSHIRE,

IN THE SENATE OF THE UNITED STATES,

Monday, April 11, 1892.

Mr. GALLINGER. In pursuance of the notice heretofore given by me, I call up Senate joint resolution No. 67.

The VICE-PRESIDENT. The Chair lays before the Senate the joint resolution (S. R. 67) providing for the appointment of a commission to select a site for the establishment of a national sanitarium for the treatment of pulmonary diseases.

Mr. GALLINGER. Mr. President, it may not be unprofitable for the Senate to pause for a brief time from the consideration of political and financial questions and give thought to a subject that deeply concerns the physical and moral well-being of a large class in every State of the American Union—a class of citizens environed by misfortune and rendered hopeless and helpless by disease. The statistics of mortality show that consumption destroys more lives than war, pestilence, and famine combined, and the individual sufferer is powerless to cope with this relentless enemy of mankind. In their utter helplessness these unfortunates appeal to the Congress of the United States for sympathy and help. Shall their appeal be in vain?

The joint resolution for the establishment of a national sanitarium for the treatment of pulmonary diseases, which I had the honor to introduce on the 22d day of March last, reads as follows:

SECTION 1. That the President of the United States shall appoint a commission consisting of three persons, two of whom shall be physicians, whose duty it shall be to select a site, and make report thereon to the President, for the establishment of a national sanitarium for the treatment of pulmonary diseases, said location to be in some one of the Territories of the United States and upon such of the public lands as may be unoccupied.

SEC. 2. That the commission so appointed shall, within six months after their appointment, report to the President of the United States where, in their best judgment, is the proper place to establish said sanitarium, together with the boundaries of the land whereon to establish the same, and also rules and regulations suited for the government of the same.

SEC. 3. That upon the receipt of such report the President shall by proclamation withdraw the lands described in said report from sale, and from preëmption, homestead, or other entry or sale, and shall reserve the same for the purpose of said sanitarium.

SEC. 4. That the surveyors-general of the several Territories shall, under the direction of the Secretary of the Interior, make such surveys and render such assistance to said commission as the said commission may desire.

SEC. 5. That the traveling expenses, fares, and other expenses incident to the selecting and reporting upon such site shall be paid out of the Treasury of the United States, upon vouchers properly certified, and the said commissioners shall each be paid $10 per day for each and every day they shall be actually employed on such duty.

SEC. 6. That $15,000, or so much thereof as may be necessary, is hereby appropriated, out of any money in the Treasury not otherwise appropriated, for the payment of said commission, their expenses, fares, clerk hire, and all other matters connected with or growing out of the selecting and reporting said site.

Two points are essential in the discussion:

First, can the Congress of the United States constitutionally and properly locate such institution upon the public domain; and, second, if so, is it desirable that it shall be done? I will endeavor, in the fewest possible words, to express my views on the subject.

When this matter was first broached one of the leading newspapers of the country declared it to be "paternalism run mad," doubtless meaning to convey the idea that it was asking of Congress an unusual and improper exercise of power. In view of the legislation already accomplished this surely is not so. The fact is, Congress has repeatedly recognized the principle that underlies this proposed legislation.

Under sections 4801 to 4812, Revised Statutes of the United States, foreign seamen who are sick or disabled are provided for in that great national charity, the hospitals for the relief of seamen, which are located in all the larger ports of the country, supported and maintained by the Government, admission to them being open to all seafaring men.

Sections 4825 to 4837, Revised Statutes, provide national homes for disabled volunteer soldiers, which, like the hospitals for seamen, are a nation's tribute to the sentiment of patriotism.

Sections 4838 to 4858 provide that—

There shall be in the District of Columbia a Government Hospital for the Insane, and its objects shall be the most humane care and enlightened curative treatment of its inmates.

Sections 4859 to 4869 provide for the deaf and dumb in the District of Columbia, by which deaf mutes in the several States and Territories have provision made for the amelioration of a terrible constitutional infirmity, and by kindly provision for such unfortunates is shown our national forethought.

Sections 1946 and 1947 provide for the setting apart of two sections of land in each township for public schools.

By section 2380 provision is made for the reservation of certain lands for town sites. Mines, salines, timber, and water are reserved under other sections for sundry uses.

By the act of June 3, 1887, John Chamberlin is allowed to erect and have a hotel on the Government reservation at Fortress Monroe.

The provisions for national cemeteries recognize the right of the Government to purchase or donate lands for national purposes, and the establishment of these cemeteries teaches the lesson that proper care for the living is the sacred charge the dead heroes left us in trust to perform.

The legislation concerning the Hot Springs of Arkansas is a recognition of the principle embodied in the proposed legislation, and it will be observed that by joint resolution of March 3, 1887, the Secretary of the Interior is required to furnish from

the hot springs, for bath houses not on the Government reservation, hot water to private enterprises.

By sections 2474 to 2477, that vast territory known as the Yellowstone Park, with all its natural wonders, has been set apart, and provision made for its protection for "public purposes of pleasure." Here the robust, and those who can afford the expense of travel may enjoy the scenery and revel in the sunshine of this beautiful spot. Is it not proper that some space be reserved for the comfort and well-being of those whose conditions of health or of purse will not admit of the enjoyment of that national park? It should be borne in mind that "They who are whole need not a physician, but they who are sick."

There are other vast tracts of the public domain set apart for parks, among which may be named the Gen. Grant National Park, the Sequoia National Park, and the Yosemite National Park, all in the State of California. The Yosemite Park alone covers over 1,000,000 acres of land, and, as is well-known, is essentially a pleasure ground. In the act establishing the Sequoia National Park provision is made for leasing small parcels of ground for building purposes, for the accommodation of visitors, a precedent that will be of use for those seeking health on the reservation that we hope to have set apart for health purposes under the provisions of this bill.

Again, by act approved May 29, 1884, establishing a Bureau of Animal Industry, means are provided for the extirpation of pleuro-pneumonia and other contagious diseases among domestic animals. Provision is made for a chief, a secretary, veterinarians, agents, and other officers, at large salaries, some of the per-diem employés receiving $10 per day. It is provided that transportation lines shall be subject to the direction of these officials, and the prosecuting officers of judicial districts are required to aid them in their efforts to stamp out pulmonary and other disorders in the cow, the horse, the hog, the sheep, and all manner of four-footed beasts.

The act placed $150,000 at the disposal of the Bureau for immediate use, and by the appropriation act of the next year $100,000 is provided annually to carry on the work. Nearly $1,000,000 has been expended by this Bureau in its beneficent operations. The question arises, will Congress, after making such liberal provisions for stamping out pulmonary diseases in domestic animals, hesitate to do something to prevent the spread of similar diseases among human beings? Or is it to become a byword that the American Congress is always ready to legislate for the protection of property, but rarely ever for the good of humanity, or the welfare of the unfortunate and unprotected?

Many other citations could be made if necessary, but surely enough precedents have been shown to conclusively prove that Congress can constitutionally and properly use the public domain for the purpose sought to be accomplished.

In attempting to show that it is desirable that the proposed sanitarium should be established, I will largely rely upon the observations and investigations of others—those who have given much thought, time, and money to the subject. It is well to suggest that this is not a new topic. Philanthrophic and public-spirited physicians have been discussing it for many years, and societies are already formed to carry out as far as they can by private benevolence the work that it is hoped Congress may aid

in doing. The American Health Resort Association of Chicago, of which Dr. T. C. Duncan, of that city, is president, and Dr. J. F. Danter, of Toronto, Ontario, is vice-president, has already done a great work in this direction.

At a meeting of this society held in Chicago October 27, 1891, nearly two thousand physicians were present, showing the great interest manifested by the medical profession in the welfare of the unfortunate class whom they are striving to benefit. Under the auspices of this society several physicians have made extensive tours of investigation through Colorado, California, New Mexico, etc., and much valuable information has been gathered.

The interest that Dr. Duncan feels in the pending legislation is expressed in the subjoined letter:

THE AMERICAN HEALTH RESORT ASSOCIATION,
Chicago, March 28, 1892.

DEAR SIR: I learn through the press that you have introduced into the United States Senate a joint resolution to set aside some of the public lands for a national sanitarium. That is a grand good move, and one that will be the means of saving thousands of lives. I hope the resolution will be adopted before Government lands adapted to that purpose are all taken up. Our association, having done work in that line, can appreciate the fact that land adapted to a sanitarium is being rapidly entered. I deem this a matter of the utmost importance, and trust you may find a ready response on the part of the Government. Certainly the masses of the people are with you.

Yours, most truly,

T. C. DUNCAN.

Hon. J. H. GALLINGER.

Dr. W. T. Shepherd, in a communication to the Medical Visitor, thus writes of the climate of Albuquerque, N. Mex.:

ALBUQUERQUE, N. MEX., *October 20, 1891.*

Of a phthisical family, I found myself in poor health a few years ago, after quite a hard course of study, and came to New Mexico, where I shortly regained health and strength. Thinking the climate near the lakes too severe, I did not return there, but went into the northwestern corner of Iowa, near the Minnesota line, in the celebrated Southern Minnesota climate, and took up a country practice. After two years' work I found my old trouble returning—indigestion, cough, a little hemoptysis, etc.—and so went to Prof. Arnulphy for examination. He reported slight deposit in left apex, and remembering the family tendency, I left at once and arrived in Albuquerque in August, 1888, after looking quite thoroughly over Western Kansas, Colorado, and New Mexico. My cough soon stopped, hemoptysis ceased, and by the beginning of the new year I seemed entirely well in every respect.

This improvement, while not so marked in all cases, is observed in nearly all coming to this climate in the incipiency, and in those where no softening of the lungs has taken place is quite the rule, even though there may be considerable deposit.

The cases of pulmonary difficulties most benefited by a removal to this climate are those of chronic pneumonia, or such as are known as consumption following pneumonia, asthma, and the early stages of tuberculosis.

Those cases of chronic pneumonia which so much resemble tuberculosis are benefited even in quite late stages, many becoming entirely well—the only limit I would put upon this class of cases being the time when so much of the lung tissue has been destroyed by suppuration that shortness of breath is constant and troublesome even in a lower altitude. People here must take deeper breaths to get the required amount of oxygen.

Asthma is always relieved almost immediately and completely upon reaching these high, dry plains. Barring cases dependent upon organic diseases of the heart you can not go amiss in sending asthma to New Mexico. I do not know a single case existing in the Territory and only one case which has required a month to complete the cure.

As to tuberculosis, our great disadvantage and the patient's distress result from the general practice among Eastern physicians of keeping their patients on hope and cod-liver oil until the curable stage has passed, and the patient comes to us as a last resort before going to his long home.

Patients should be sent here just as soon as the diagnosis can be made. Do not let them put it off one day. They must come on at once, and straighten business matters afterward by mail. They must fly as they would from the cholera. Hundreds are killed by that one or two months to arrange business matters.

Before softening has commenced the patients have a fair chance of recovery—perhaps as good as an ordinary case of typhoid fever or pneumonia, and their chances decrease with every day of delay.

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It is another mistake of Eastern physicians that cases having hemorrhages should not come here. This seems not to be true at Albuquerque, for cases having hemorrhages do unusually well.

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I have made considerable study of the native people with a view of finding whether or not they have tuberculosis, and although they live in the most unsanitary surroundings no case of the disease has come to my knowledge. I have yet to find a case of tuberculosis developing in this climate even among the adult children of those who came here years ago with the disease.

Dr. A. Petin, a distinguished physician, educated in Europe, makes the following contribution to the Journal of the American Medical Association:

LAS CRUCES, N. MEX., *October 16, 1891.*

Dr. T. C. DUNCAN,
President American Health Resort Association.

DEAR DOCTOR: In conformity with my promise, I send you my report, at last. Ever since 1872 I am a resident of the United States, but every other year, and sometimes every year, I take a trip to Europe, where I attend clinics. Three years ago I had the opportunity of listening to several lectures by some eminent professors of Paris. Their subject was phthisis.

After several meetings with some of these gentlemen, I was entertained with a proposition to find a more suitable climate to establish a sanitarium for consumptives, at an altitude of from 4,000 to 5,000 feet above the ocean, not too cold, not too warm, without much rain, neither fog, and especially avoiding snow. The object of finding such a climate was to permit the patients to be out of doors as much as possible and even to have them sleep in the open air seven or eight months of the year. In Germany a great many patients are kept in pine forests, and some of them find relief by the emanation, but lately a great many prominent physicians of all nations found that it was not only the pine emanation, but the pure air which benefited them the most. It was also with the same belief that a French medical society was formed to rescue the consumptive children from that deadly disease.

For over two years I traveled most of the time in North, Central, and South America. I have found a great many good locations, with finest scenery, but almost everywhere there is some objection, either too much moisture in the atmosphere, fog, cold, snow, or excessive altitude. After traveling all over the Pacific coast, Nevada, Arizona, and Colorado, I had the good fortune to meet Mr. H. F. Grierson, of the Santa Fe Railroad, and traveling together for several months we came to see every place of interest in New Mexico, Texas, and Old Mexico. In the Territory of New Mexico we found numerous good places, but some rather too cold, some too high altitude, and others too much snow for certain classes of patients. By gathering a great deal of information from old residents, I found malaria existing more or less all along the Rio Grande, and another objection to the valley is the dust brought by the river, which is so fine as to fly at the smallest breeze; but altogether the best climate with the most sunshine is to be found in Southern New Mexico, although some difference must be made on account of temperature.

In fact I was never satisfied until I found the San Augustine plains, with an altitude of 4,800 feet above the sea, surrounded by mountains from 1,200 to 1,500 feet higher, with unsurpassable drinking water and also mineral waters, one spring containing a great quantity of peroxide of iron and manganese, and others containing sulphate of lime in enormous quantities, etc. But the grandest of all is the level plains, 170 miles long and about 80 miles wide, all covered with palms, cactus, saponaria, Panama plant, soapweed, etc., and every kind of flower all the year round, giving the best opportunity for riding, either horseback, or in any kind of vehicle. The temperature is the most even, the thermometer all the year round at an average of about 62°, with scarcely any snowfall, and when it does snow it does not last more than an hour or two; no dust, no malaria, and the soil is the most porous that can be found anywhere.

There are some samples of consumptives cured residing here who, when they first came, were not capable of walking alone, and who are enjoying good health ever since. There is a peculiarity in this country. As soon as one gets here he feels happy! The amount of rain for three years was an average of about 4 inches a year. Fogs are entirely unknown, and very seldom is there great wind. There is an abundance of game of all kinds, good fishing, and beautiful shade trees grow at the foot of the mountains.

There any patient can sleep out of doors eight months of the year without fear of catching cold.

I hope to see you soon and to have a trip over there where you will judge for yourself if there is any other place to compare with the one I refer to. Having no other interest than a philanthropic one, I am of the opinion that a great resort can be built there.

Dr. J. F. Danter, of Toronto, who made an exhaustive investigation of the subject of climatology, with reference to the treatment of consumption, at the instance of the American Health Resort Association, thus writes to the Medical Visitor:

TORONTO, CANADA, *August 31, 1891.*

To the American Health Resort Association:

I have the honor to report as special commissioner appointed by your president, T. C. Duncan, M. D., to visit New Mexico and investigate its claims as a health resort for consumptives, that I went through the whole Territory, from Raton to El Paso, and spent most of August in my investigations.

That country is divided by the Rocky Mountains almost in the center from north to south. On the west side of the mountains is the Rio Grande River and its many tributary streams that make the land broken and undulating with wide valleys and plateaus. Between Santa Fe and Albuquerque the range is cut through by a tributary to the Rio Grande. This break in the mountain chain is a most important one in moderating the climate thereabout. The streams in the eastern half of the State trend to the southeast almost from the Raton range on the north. This spur of the Rocky Mountains doubtless shunts the "northers" farther east. The country east of the main Rocky Mountain range is more undulating and well adapted to grazing and will be beneficial to those cases of incipient consumption who can play the cowboy or farmer. Good farms can be had by irrigation, and this locality will be beneficial to many consumptive families.

Las Vegas.—The mountains seem broken into many spurs as we approach Las Vegas, which is a smart city of some 6,000 people, with fair accommodations. The Hot Springs are the great attraction. I tested them in every way possible. There are hot and cold springs and baths of all kinds. The bath attendants are experts, and I can report that this is a delightful place. The hotel affords the most elegant accommodations; cheaper places can be had near by. The air is very bracing. I met there consumptives who had hemorrhage in Boston and the East; they were improving. I met others with special diseases, all doing well. For rheumatism, syphilis, blood diseases, it is an excellent place to go. I was surprised to see consumptives who had had hemorrhages there and improving. The altitude, over 7,000 feet, I should fear was too trying; still, if they do not exert themselves much, take the baths and drink the water, they will doubtless continue to improve.

The rare air doubtless aids rapid healing of diseased surfaces. Some had been there before, went back East, were worse, and returned to remain. Recovery the second time is not so rapid as at first, showing that going East was a mistake. This is a fact that people are slow to learn.

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Santa Fe was my next stop. This is a quaint old town of some 7,000 people. One forgets himself among the many things of interest here, which fact alone would be helpful in many cases of consumption.

It is situated in a valley opening and widening to the south, with mountains east and west, and broken peaks to the south. It was not hot, and can not be very hot in summer nor very cold in winter. This location is well ventilated, and at times may be too raw and severe for the very feeble. The altitude is 7,000 feet, and the air very stimulating. The hotel accommodations are good, and the people most hospitable.

I was royally entertained when my errand became known. It is the capital city, and the governor, judges, merchants, editors, and physicians vied with each other to show me all the special merits of the city and Territory as a health resort.

The old Government military reservation with fort and barracks in the center of the city they hope to have set aside for a national sanitarium. It would make an excellent one. I was feasted with the finest fruits I ever tasted, apricots, peaches, apples, etc. There are some fine springs, and the Santa Fe River seems ample for irrigation as well as to supply the city.

Albuquerque was my next point. The country between this place and Santa Fe seemed to me favorable for invalids.

The valley here is wide and well watered by the Rio Grande, which is a broad, shallow river, and the fall is ample for effective irrigation. On the river bottom are good crops and rank vegetation. The best place for consumptives here is on the mesa. I met here many consumptives, some improving, some holding their own. Most of the people I met came for their

health. The necessity for being active and out of doors to get the benefit of the climate, was the testimony of nearly all of the physicians.

The Commercial Club entertained me, and I was driven out to the springs and to Camp Whitcomb over the mountains. Camp Whitcomb is a good place for resort during the very hot days of summer. The water mostly used is melted ice, manufactured in this city. This is an active, bustling place. It is 2,000 feet lower than Santa Fe, and hence warmer. The railroad divides here; one line goes to California and the other down the valley and on to Mexico. Invalids who must go on to California, I learned, stop here to advantage.

I recommend that consumptives sent here or to any other point should as soon as possible be distributed among cottages, with a nice plot of ground to occupy their time and attention.

El Paso.—The most southerly point I visited in the Rio Grande Valley was El Paso. It is a city of about 10,000 people, and is situated at the foot of the Rocky Mountains, where the Rio Grande cuts through on its way to the Gulf.

The valley here is not very wide. It was very hot the day I was there, and, except for the winds that I fear must sweep through in winter, will be a good point for consumptives. The altitude is 3,900 feet, the lowest point, I believe, in New Mexico. I ascertained from the physicians that the city was very healthy. The accommodations are good.

Las Cruces was a place of which I expected much. I met Dr. Petin and was entertained by Prof. Hadley, president of the Agricultural College, which is located here, affording free tuition. We went over the Organ Mountain, where Dr. Petin had selected a place for a sanitarium, but before he could secure the land squatters had taken possession. It certainly was a nice, secluded, fertile valley, and its only drawback is that it is 25 miles from the railroad. This is a town of some 3,000 people, half of whom are Mexicans. I saw here large flocks of Angora goats, which are very profitable, I was told. The altitude is about 4,000 feet. The valley is wide here and very fertile when irrigated. Dr. Petin thinks that it will equal France as a grape country; it produces the finest grapes I ever saw. His opinion of it as a health resort is that it is the best in the world. The low altitude, the southern latitude, and the dry, warm winds coming from Mexico, are its special features, adapting it to severe cases of consumption. As a winter resort it has special advantages for feeble invalids, but the accommodations are not very extensive. The water here is good. I also met here Dr. Frazier, of Toronto, and Judge Newcombe, formerly of Nova Scotia.

San Marcial was my last stop on my return to the Rio Grande Valley. It is a small town and has an old, abandoned fort and military reservation that would make a good sanitarium, but I learned that a man had laid claim to it. This is also a good point for fruit and herds.

There are many other small towns in the Rio Grande Valley that I did not stop at, but all have the general merit of being warm and dry, which will commend them as good points for consumptive colonies.

I think that New Mexico surpasses any locality for consumptives I have yet visited, and I have been all over California, Colorado, and the South, Sandwich Islands, and Europe.

I stopped off at Cimarron and Hutchinson, Kans. They are both in a comparatively dry section, and the lower altitude renders this a good intermediate point to get acclimated and to test the climate before going to higher altitudes; therefore the merits of Southwest Kansas, with its medium altitude, should not be overlooked by the profession.

In conclusion, I am decidedly of the opinion that the region visited is for consumptives superior to any other part of the United States or the world of which I have any practical knowledge.

I will next quote from Dr. W. P. Roberts, his views being found in a communication to the Health Journal. Dr. Roberts is now traveling through New England, interesting the medical profession in the work of the Health Resort Association, and is about to organize an aid society in Boston for the purpose of securing funds to send indigent consumptives to a more favored clime. Dr. Roberts writes as follows:

BOSTON, MASS., *September 20, 1891.*

To the American Health Resort Association:

Pursuant to the appointment as Special Commissioner by your honored President, I visited Kansas, Colorado, and New Mexico, going as far South as El Paso, Texas, and across the river into Old Mexico, and beg leave to present the following report:

Allow me to premise that I had to leave Maine on account of consumption that was a family inheritance. I was given up by five physicians to die with the awful scourge that carries off almost 30 per cent of the whole people who

die on that coast. I was advised to make a change of climate as affording a possible chance of prolonging my life. I reached the upland prairies of Illinois in the lovely autumn weather, and began to improve at once in the dry open air. I thought, like many others, that because I was almost well I could safely return, but the disease again became active and I was obliged to return, this time to the prairies of Iowa. I fully recovered and have had no trouble with my lungs since: but, while vigorous looking, I feel I am not the man I would have been had I come West sooner, while in my growing teens. Therefore I am anxious to urge young people whose parents succumbed to consumption to leave New England.

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In going to Denver we cross the divide beyond Colorado Springs. The streams here flow northeast. This north and east exposure has been against Denver as being a desirable residence for consumptives. Many, however, have been benefited and many have died as I found by the mortality records. There is a feeling that the air at times is being contaminated by the smoke and gases from the massive smelting works, containing, as they do, volatilized galena (lead), arsenic, antimony, etc., although an effort is being made to condense these from the smoke, as is done in other smelters. The same objection is increasing against Pueblo and El Paso. I collected much valuable data for our association.

Colorado Springs (a city without a single spring) is more favorably located. I collected here facts of interest from the mortality records and the leading members of the medical profession. This is without question the best point in this section of Colorado for consumption. I learned that pneumonia was often prevalent, severe, and fatal. Their most disagreeable weather is during March and April. Sufferers with pulmonary hemorrhage, unless complicated with organic heart disease, need not feel barred from going to any of these cities.

I found, in searching the mortality records of Colorado Springs, that a few cases of young and middle-aged persons raised in that climate had died from consumption.

Pueblo is several degrees warmer than either of the other cities visited. In fact, it was hotter than any place in New Mexico when I was there. Except for the smelters already noticed, it is a good health point for those with weak lungs. I met many people who were given up as hopeless in Chicago and other Eastern cities, but who are now well. I have no doubt that a few miles away from this city, in a lower altitude, is the "Beulah land" of Colorado for those with weak lungs.

At La Junta, in the extreme eastern border of Colorado, I met several witnesses who were willing to assert that the climate had cured them. Similar testimony is at hand in Trinidad, and, in fact, in all of the places in Colorado I visited. What a golden, glorious health record for the Centennial State!

The Raton Spur of the Rocky Mountains is crossed by plunging through a long tunnel. Here I was informed asthmatics, no matter how severe, lose their difficult breathing as they emerge into the pure air of New Mexico. From Raton, which is quite a town, to Las Vegas, there is a gradual descent. Here is the famous Maxwell grant, where are vast herds of cattle. Irrigation is making it productive. In this section many a consumptive young man years ago got well while "roughing it" as a "cowboy." It is high (6,500 feet), warm, and dry—too dry, perhaps, and dusty.

Las Vegas and the hot springs are both a curiosity and a revelation. It is a surprise to find such an elegant hotel among the mountains, and hot and cold springs side by side. One can get all sorts of baths. I witnessed a mud bath. The patient is covered with the soft, hot mud, which is here strongly impregnated with valuable mineral ingredients, then thoroughly bathed or steamed, cooled, and wrapped to rest. Fresh mineral earth is at hand. The effect of this bath on certain skin affections is wonderful. The water shows many valuable ingredients. It is a Carlsbad, but it is also wonderfully strong in lithia. For rheumatism, syphilis, and skin diseases generally the waters have made wonderful cures. The Rocky Mountains here are broken, and the source of these springs suggests volcanoes and liquid available mineral ingredients of reliable medicinal value. The reputation of these waters extends back many years. There will be a great flock of visitors when they become better known.

Santa Fe I approached with dread on account of a weak, irritable heart that followed an injury to the spine some months ago, but was agreeably disappointed. I could breathe with greater ease and slept better than in any place visited.

I will not stop to describe my visit to this quaint old town of crooked streets, adobe palaces, small fruitful gardens, and wonderful buildings, especially the oldest assembly hall, decorated with ancient war weapons; nor my reception by Governor Prince and many citizens; nor how I was feasted with

the choicest of fruits (apples, peaches, apricots, pears, plums, small fruits, etc.).

My stay was most pleasant, and I did not see an insect or reptile to render the life of the most helpless invalid a burden. The altitude of this city is about 7,000 feet; it is sunny and warm, with cool nights. The air is very dry. The rainfall is only about 14 inches, or one-fourth of that of my old New England home. The mountains surround it on all sides, and hence the air is very free from dust and must contain much ozone. The summer is very pleasant. In the winter it may be trying for the very feeble, but I saw many cases cured, and the mortality is very low.

At Albuquerque we are in a lively, flourishing city, with a most delectable climate, on the mesa. On the river bottom the doctors informed me that they sometimes have intermittent fever to deal with, especially below the irrigating ditches. The roads are fine after getting on the mesa leading into the mountains, where are springs of pure water and soda springs. Here can be taken desert claims (320 acres), and in the mountains mining claims. I was shown many people who came for their health. It certainly is a good point for consumptives.

We pass on to Las Cruces, another Mexican town, where the finest grapes are raised. A 20-mile ride over the pass of the Organ Mountains, we come to the spot selected by Dr. Petin for a sanitarium. The road is not a difficult one and the air most invigorating. At a ranch affording all the comforts of civilization we spent the night. The young ladies, who have been here sixteen years, are models of health. At the foot of the mountain are many springs and a natural bathtub worn out of the rock. Here is a most desirable place for a sanitarium.

El Paso is the "allopolis" of the Southwest—a great business center. The climate is fine, and a sheltered location on the east slope among the foothills promises to be a good retreat for invalids.

As to the climate of Southwestern Kansas and Eastern Colorado, I submit that it will be preferable for a certain class of cases, such as incipient phthisis, with organic heart trouble and catarrhal complications.

To sum up all my observations, from South to North, we have in Western Texas, all of New Mexico, part of Arizona, Southeastern Colorado, and Southwestern Kansas, especially the high ridge upon which the Arkansas flows, the health-giving climate in latitude, longitude, and altitude possessed by no other scope upon the earth. This whole section is equal to supporting the present population of the United States. That this is the sanitarium section of this country, especially for persons with weak lungs, let those who doubt my statements go see for themselves, and become convinced.

The next witness I will call in this interesting discussion is Dr. Frederick W. Seward, of Goshen, N. Y., who seems to have had exceptional opportunities for making an intelligent investigation. Dr. Seward says:

To the American Health Resort Association:

Agreeable to your instructions the writer visited Western Kansas, Colorado, New Mexico, and Western Texas, and herewith submits his report upon the climatic conditions of the same.

Passing westward beyond a line drawn through Kansas at its center from north to south we leave the rain belt and reach the eastern boundary of the dry or arid region, which extends westward to within a few miles of the Pacific coast, within this arid region a marked difference in soil and conditions of the atmosphere prevail from that in the rain belt.

The soil of the prairie section is dry, porous, and impregnated largely in places with alkaline matter.

Limestone and sandstone are underlying rock foundations in most of Nebraska, Wyoming, Colorado, and New Mexico, while in New Mexico and Arizona volcanic rock is also abundant. From the character of the rock foundations, the soil, and the extreme dryness and purity of the atmosphere, it is evident no acid or noxious gaseous emanations prejudicial to health can arise from the earth's surface.

Atmospheric conditions are much the same in their chief characteristics in all this region, differing mainly as to the temperature in different latitudes and at different altitudes. These, however, are of great importance, bearing upon the invalid. The summer season is admirable in all parts of the West except in the extreme southern portion of New Mexico. North of New Mexico the winter months are objectionable and not well suited to the sensitive invalid. Take it all in all, New Mexico offers the best climatic conditions throughout the year of any of the continent. The soil, as has been stated, is dry and porous, yet, as a rule, well covered with grass, sandy wastes being infrequently found.

The air is dry and pure. Dry because the rainfall is lower than in any other portion of the country of equal altitude, from 12 to 18 inches; and again,

because the precipitation is very rapid when it occurs, being principally in the form of showers, and the relative humidity is extremely small.

Dry again because of the inventory of the sun's rays and absence of cloudiness. From tables compiled from observations taken at various Government posts during a long series of years, we find the following conditions to obtain at points widely separated and which give accurate knowledge as to their principal climatic attributes:

	Cedar Keys.				Santa Fe.				San Diego.			
	Spring.	Summer.	Autumn.	Winter.	Spring.	Summer.	Autumn.	Winter.	Spring.	Summer.	Autumn.	Winter.
Mean cloudiness	39	53	30	40	35	45	23	31	38	26	26	34
Mean relative humidity	73	75	77	77	36	43	50	52	72	76	69	62
Mean absolute humidity	57	91	70	50	12	37	15	11	39	57	44	29
Mean rain and snow (inches)	9	25	13	12	2	8	3	2	1	0	1	6
Seasonable temperature	70	83	74	60	47	66	48	30	58	68	63	54
Percentage cloudiness in year	40.4				35.5				31			
Absolute humidity	67				19				42.50			
Precipitation (inches)	59				15				8			

	St. Paul, Minn.				Atlantic City.				El Paso.			
	Spring.	Summer.	Autumn.	Winter.	Spring.	Summer.	Autumn.	Winter.	Spring.	Summer.	Autumn.	Winter.
Mean cloudiness	55	51	56	54	55	48	44	52	19	28	20	28
Mean relative humidity	63	71	68	77	78	80	69	75	34	41	54	50
Mean absolute humidity	18	51	23	6	37	64	43	15	19	43	30	17
Mean rain and snow (inches)	7	12	7	3	10	12	11	11	1	6	3	2
Seasonable temperature	41	67	45	10	46	70	63	33	63	81	61	45
Percentage cloudiness in year	54				49.76				23.75			
Absolute humidity	24.50				39.75				27.25			
Precipitation (inches)	29				44				12			

From the foregoing it will be observed there is a marked difference in absolute humidity between Santa Fe and El Paso on the one hand, and the other four stations on the other. Also in the former the rainfall is largely during the summer months, occurring as before stated in showers, while in San Diego three-fourths of the precipitation occurs during the winter months, and in the three remaining stations is about evenly distributed among the four seasons. In explanation, the wide difference in percentage of absolute humidity and precipitation at San Diego is due to altitude, sea-level air carrying much more moisture without precipitation necessarily occurring.

By the physician climatology is to be studied from the hygienic ratherthan the therapeutic standpoint, and the effort to do the latter has probably given rise to much of the misinformation upon the subject, and is responsible for much of the disappointment resulting from changes made by invalids, acting under advice given from false premises. Those attributes of climate which tend to the preservation in its integrity of organic life, or to the restoration of vital energies, if impaired, and which have become well recognized as essential to this end, are:

Dryness of air; dryness of soil; abundant sunshine; intensity of sun's rays; purity of atmosphere; altitudes of 3,000 to 9,000 feet; diminished air pressure; absence of noxious gaseous emanations; absence of long-continued extremes of temperature.

The above attributes give rise to another condition which to my mind is of importance and deserving of further study. I refer to the increased electric tension of the body, which is experienced in dry atmospheres. Lessened induction of electric fluid gives rise to a more positive state of the body. A positive state is one of energy, functional activity, and, consequently, of increased nutrition and strength. It has been demonstrated within a compara-

tively recent date that men employed about electrical works, and particularly on electric street cars, or where there is a large induction of electric fluid, have experienced immunity in a large degree from chronic ailments.

The atmosphere immediately about them is heavily charged with electricity, hence that within does not flow from them. "Virtue" has not gone out of them. It is a question if the enervation we experience from warm, damp weather is not largely due to the rapid outflow of electric current, or, in other words, to a more negative state of the system. Contrast with this enervation the stimulating influence of a cold, clear, crisp atmosphere, where the humidity is congealed and the air becomes a less perfect conductor. In studying the climatology of our country from this standpoint, and admitting the value of the above-mentioned attributes, as we must, I am ready to affirm that in no other section will the perfection of these be so nearly found, or approached, as in New Mexico. With rare exceptions these attributes are to be sought for in the selection of a climatic change for the invalid. It is a common error to suppose that an even temperature is more conducive to health than frequent changes. Extreme changes, I admit, are not well borne by the invalid, but these are not the rule in the arid region, except at points contiguous to the snow-capped mountain peaks. While an even temperature means a moist atmosphere, long-continued extremes of temperature exhaust the system, and herein lies the explanation of the unfavorable effects of the climatic influences of the health resorts of the South at sea-level altitudes, and at the North, in regions of continued cold, such as Minnesota. In the North, which is much dryer than in the South, the long extremely cold winter saps the vitality of the invalid and he sinks under the exhaustion. In the south he dies, not from inability to keep up the waste from rapid combustion, but from inability to supply compensation for, or stay the rapid disorganization of, lung tissue, which is augmented by the moist, warm air. The consumptive in the South dies easily but very rapidly.

In New Mexico the days are warm, but not oppressively so, while the nights are always cool. There being no dews the night air is never damp nor in the least injurious. One can sleep on the ground with no haunting dread of rheumatic pains or lameness on awaking. An actual observation demonstrates the fact that this applies as well to the invalid as to the robust individual.

On this point of "variability *vs.* equability" I wish to quote Dr. Denison, of Denver, a recognized authority. He proves "by comparing twenty-five dry and twenty-five moist prominent stations and health resorts in the United States, and the fifteen moist and the fifteen least variable signal stations in the United States for 1883, how uniformly variability goes with dryness and equability with moisture.

Variability is quite a uniform constituent of dry, high climates, and that as the dryness predominates, the marked variability is less felt, and is less, if at all, objectionable. On the other hand, marked atmospheric equability, wherever found, is *prima facie* evidence of excessive humidity. It is toadyism to the mistakes of medical antiquity for equability to be any longer insisted on as a constituent of the best climate for phthisis. It is all right and essential for humid climates, but for dry, cold, and elevated resorts it is out of the question.

Besides the quality of stimulation which is associated with variability, there is an important consideration in the purifying of the atmosphere, which variability indicates. This happens through the alternate expansion by heat and contraction of the air by cold, together with the nightly chilling and sometimes freezing, which regularly renders it inimical to germ life.

The purity of atmosphere which is represented by warm, moist, and equable climates, is not to be compared with that purity which is represented by the opposite attributes. The first is where the temperature so continuously hovers within the limits of the microbe's needs, where sound as well as heat is smothered in a short distance, and the sun's rays give a dusky red glow.

The second, indicating a comparative absence of germs, is where exposed meat can cure and not spoil; where far-distant objects appear near and the unobstructed rays of the sun give nearly as white a light as does an electric lamp. These characteristics of high climates New Mexico has to the full in common with other places. In the Rocky Mountain region the clearness or transparency of the air is a decided indication of its purity. So a large area, having throughout a similar atmosphere, through which one can see most remarkable distances, and besides probably be deceived as regards the same must indicate as does its coldness, rarefaction, and dryness, that the purity is approaching the absolute.

This purity of air, dryness of soil, and warm but not oppressive days, together with intense but genial sunshine, has the desired effect to keep the invalid in the open air constantly—one of the most essential points in the treatment of the chronic invalid.

Be the cause of consumption what it may, whether as Koch and Cornet contend, always due to contagium, or as other assert, to heredity, the truth

is, depreciation of vitality from whatever cause has a direct and positive bearing upon its development within the human organism.

These characteristics of climate just as before stated, which tend in the largest degree to the building up of the depressed system, offer the most positive assurances of relief from the existing disabilities.

This is not a matter of theory. One has but to visit almost any section of the arid region of our country to find ample confirmation of the statement. So rapid has been the development of the aigest all those [illegible] thousands of soldiers, the majority of whom were doomed to chronic invalidism in the East and South, are to-day living examples of the beneficial effects of the climate.

From weaklings they have been made strong, from a condition of helplessness they have been transformed into beings of power, from a life of discomfort and wretchedness they have been lashed into the blessed sunshine of healthfulness, contentment, and thrift.

Now, in further confirmation, we have but to glance at the death rate from consumption in different States:

Vermont, Maine, Massachusetts, New Hampshire, Rhode Island—25 in 100.
Connecticut, Delaware, District of Columbia, New Jersey, New York—20 in 100.
Maryland, Michigan, Ohio, Pennsylvania, West Virginia, Washington—16 in 100.
California, Indiana, Kentucky, Minnesota, Wisconsin—14 in 100.
Dakota, Iowa, Oregon, Tennessee, Virginia—12 in 100.
Illinois—11 in 100.
Nebraska, Missouri, Montana—9 in 100.
Colorado, Kansas, Louisiana, North Carolina—8 in 100.
Alabama, Florida, Mississippi, Utah—6 in 100.
Arkansas, South Carolina, Texas—5 in 100.
New Mexico—3 in 100.

It must not be supposed the remarkably low death rate in New Mexico is due to imperfect statistical observations. We have assumed entire reliability to the contrary, and the bearing of all testimony is emphatically in favor of New Mexico as a resort for the consumptive, and it is not the consumptive alone who is warranted in locating this genial climate with the expectation of finding relief from his sufferings.

The writer has personal knowledge and experience as to its wonderful invigorating effects upon the system of nervous prostration, or "American ills," as it has been aptly termed. That state of the system which results from overtaxation, and which is becoming so common in our day by reason of the severe strain put upon us in the endeavor to keep pace with the demands of business and social duties, and which state, by reason of its extreme prostration, so much invites the development of any latent or hereditary form of diseases.

Malnutrition and insomnia are the prominent features of such cases, and their prolongation must inevitably result in a fatal termination.

However, under the stimulating effects of such climatic conditions as are found in New Mexico, causing the invalid to [illegible] such in the open air and basking in the genial warmth and purifying influences of the sunshine, the dormant or suppressed functions of digestion or assimilation are awakened and called into a new activity; the blood, [illegible] with nutrient and vitalizing material, is sent coursing through the tissues of the body and repair instead of waste becomes the order of the hour. Then the starved nerves, satisfied with their new diet, as the hungry man with his meal, go to rest and give sweet sleep, the relief of all remedies to the wearied and diseased brain and body. Dyspepsia, constipation, vanish in all its forms in [illegible] conditions of heredity or of malnutrition are favorably impressed here.

The subject of organic heart disease should not be sent to an altitude of more than 1,500 feet at first, and the consumptive whose normal breathing capacity has become impaired to the extent of 50 per cent should not go beyond an altitude of 2,500 feet at first.

The hemorrhagic may be sent with advantage to 5,000 or 7,000 feet at once. The opinion that diminished air pressure contraindicates high altitudes has been [illegible] by actual experience. Greater than altitude is now regarded as a reliable preventive.

While perhaps enough has already been given to show the advantages that the Rocky Mountain region offers for those suffering from weak lungs, I can not refrain from incorporating an exceedingly interesting paper received a few days ago from Dr. George M. Kellogg, of East Las Vegas, N. Mex. The only hesitancy I feel in giving this paper, is that it relates wholly to New Mexico and the fear that so much testimony in behalf of that Territory may arouse the suspicion that the case is prejudged.

Such is not the fact. If the Commission is appointed a thorough examination will be made of every available place, and the decision reached will be upon the best obtainable information. In sending his contribution Dr. Kellogg writes as follows:

EAST LAS VEGAS, N. MEX., *March 29, 1892.*

DEAR SIR: People of this Territory have remarked with interest that you have introduced a bill into the Senate concerning the sanitary claims of the Rocky Mountain country. Much has been published on this subject, written by tourists who interviewed the country only from a car window, but I have been moved to give you the views and observations of a physician, based on several years of experience and the study of climatology throughout the length and breadth of the Territory. If there is any matter in the paper that you may wish to make use of you may depend upon it as reliable, justified by observation, careful statistics, and by human history.

Very respectfully,

GEORGE M. KELLOGG, *M. D.*

Hon. J. H. GALLINGER.

Dr. Kellogg's theme is "New Mexico as a health resort," of which he writes in the following entertaining and instructive way:

The Rocky Mountain region, especially the mountains and upland plains of New Mexico, is a land lifted by nature into the pure serene, for the general invigoration of the race.

New Mexico, with a portion of Arizona belonging to the Rocky Mountain crest, and its eastern slope, has, perhaps, the most equable climate known. There are no extremes of winter-cold or of summer-heat while there is a notable absence of dampness in air and earth. Little moisture is left for this region after the hot winds of the Southern Pacific are wrung dry by the coast ranges. The elevation of this country—from four to eight thousand feet—is just sufficient to mitigate that oppressiveness from summer heat which otherwise would be seriously felt in these latitudes from 37° to 32°. The winter months throughout this region, owing to the ever-present sunshine and the positive shelter of the mountains themselves, afford the most satisfactory retreats yet proposed for invalids.

The purity of the air is shown in the absence of atmospheric dust and disease germs. Its notable clearness over the plains has been remarked for many years. Objects are distinctly visible miles away, which in the average atmosphere would be hidden by fog and dust,

With a sun visible nearly every day in the year, and often for months without a cloud-fleck to obstruct its direct rays, the sun heat is yet really grateful instead of oppressive. The native, when enfeebled by illness or age, basks in the sun. It is the best medicine that he knows. It renews his youth by quickening life at its springs.

The invalid and valetudinarian feels at once this mild stimulus. Simply to breathe the air seems a luxury and a delight.

A noted peculiarity of this upland country is the coolness of the nights even in the extremes of summer. The earth, heated by the continuous sunshine, freely radiates at night its surplus, there being no blanketing clouds to confine or intercept. Uninterrupted and balmiest sleep is thus insured, bringing healing upon its wings; while the absence of noisome insects to torture is an additional security.

It is certain that change of climate as a curative measure, promising though it be, requires means in abundance to secure its best effects. But as though nature were willing to bestow her best resources on the poor as well as the rich, the benefit of this climate is open to all at a minimum of cost. The least expensive structures afford ample shelter and security at all seasons.

Nourishing food can be obtained on the average at its cost in our great population-centers; fuel, too, is largely unnecessary where the sun's largess is ever-present and grateful.

Not to mention the beautiful and abundant building stones the Mexican adobe houses of sun-burnt brick are delightfully cool in summer and warm in winter. These may be built of materials at hand, or, by larger outlays, can be made as luxurious as could be desired. Along the leading routes of travel such might be conveniently located, and nowhere be more than an hour away from skilled physicians and needed supplies.

While the elevations of New Mexico, from four to eight thousand feet, possess the same essential climatic features, each altitude has some special desirable quality.

The plains are more uniformly dry and their winters less rigorous than in or near the mountains. In all these sections the atmosphere has the characteristic clearness, save for occasional dust storms.

The mountains catch the greater part of the rain and snow and furnish the chief water courses and supplies for irrigation in the Territory.

The summer rains, from the middle of July to September, are chiefly observed in the mountains and are quite transient. In the plains these are uncommon and there is an almost entire absence of dew.

Nature, as though to confound the wise, shows vegetable life in hundreds of native species, flourishing on the plains with wondrous healthfulness—unvisited by that mold or fungus so conspicuously inimical to plant life in damp regions. The cryptogamous plant world, which elsewhere sends its spores and disease-producing germs across the world, is almost unrepresented in the dry plains and mountains. Fungi, mosses, ferns, lichens, and liverworts, which thrive so signally in the damp and dark, find small encouragement in the Sunshine State.

The experiments of Tyndall to demonstrate the purity of the atmosphere in the Alpine glaciers can be repeated even in the foothills of the Rocky Mountains, at an elevation of from four to seven thousand feet. On the plains, at four to five thousand feet, putrescence is almost impossible. The ordinary ranchman knows that he may with impunity hang his venison or beef under a tree or shed for weeks, even in summer.

The manifold vermin of the infusorial and of the insect world are not tempted to climb or fly to this region from their eastern homes.

Most men believe that in the general upbuilding and economy of the earth "some steadfast purpose runs." Have not these mountains been pushed up in accordance with a plan which involves the general good of being?

The genius of modern civilization may be maritime, but that of the most ancient periods certainly was not. The early home of the Caucasian race was in the uplands of Asia. The shepherds on the oriental mountains studied and named the stars ages before the first frail shallop was launched from the shore. The early Phœnician navigator had learned elsewhere to trust the stars before he ventured himself and fortunes on the waves.

The Aztec and Peruvian civilization originated in the mountains and plains of the western continent. It may well be, then, that those influences which led men to cultivate religion, art, and science in the early period still remain as an earth heritage to future mountain dwellers.

History in certain broad senses repeats itself. It is at least certain that nature has upreared these mountains in order to diversify the conditions of mankind, to vary their industries, their resources, and character. The physical well-being of the race, as well as its moral and intellectual nature, may here again find its highest expression. It is certainly possible for such as can not have the privilege in crowded and stifled cities to live clean and healthful lives in the mountains.

Even in the most prolonged summer heats sunstroke is unknown in New Mexico. Diseases associated with malaria are excessively rare. Acute rheumatism, pleurisy, and pneumonia seem incident only to special and unnecessary exposures to cold night air and subterranean damp, peculiar to a miner's or cowboy's life. The diseases for which the mountain climate may be claimed as a prophylactic are, first, those deadly disorders of infancy, "summer complaint" and cholera infantum. Abdominal disorders are rare. Typhoid and typhus fever are but feebly represented by the dreaded "mountain fever," which is neither so deadly nor so common as those diseases in the East.

There are some neuroses, like chorea, which seem to be aggravated in this country. On the plains, however, neuralgic disorders, with due avoidance of night air, are, as a rule, benefited. But of all diseases incident to humanity, lung troubles, like tubercular consumption, bronchial consumption, and asthma, are the most uncommon among the native population.

Invalids with lung diseases seem to be greatly relieved and often positively cured.

It is almost certain that where there is simple tuberculous cachexia the mountain climate will eradicate it. It is only in the late stages of phthisis that improvement is not at once experienced on change to New Mexico. Bronchitis and asthma are generally greatly relieved and are often cured by simple residence. But where the lungs are riddled by disease and tied down by adhesions the very rarity of the atmosphere becomes a disadvantage.

The striking feature of the mountain country is the diathermancy of the air. Less heat is absorbed by the atmosphere than in the lowlands; this obviates, in great measure, the oppressiveness of the air. Moreover, there is on this account an immediate and great difference between temperatures in sunshine and in the shade.

This difference has been calculated as 1° Fahrenheit for every 230 feet of vertical ascent. This gives for elevations of 6,000 feet above 20° Fahrenheit difference. But the effect on the sunshine of the absence of aqueous vapor in overcoming its direct depressing influence is something for which there is no accurate measure. Perhaps at the crest of the continent there is an electric or other earth aura which ameliorates the sunshine and causes it to invigorate and quicken the pulses of life.

Statistics have proved that the West India Islands and all the shores of our Gulf States are unfavorable for most lung diseases and rheumatic fevers. They are known also as hot-beds of malaria and of abdominal disorders generally. The same is true of the climate of India.

The boasted climate of Nice and Mentone, save for a short period of the year, is found a signal failure. This is true of all the islands and shores of the Mediterranean. Except the parched land of Egypt, no region has been admitted by English authorities as especially favorable for lung troubles. The exception is probably due to the dry though hot atmosphere. Egypt is, however, the home of the plague, cholera, of abdominal diseases, of ophthalmia, and a thousand discomforts.

Great Britain in her ambition to possess the earth has accomplished one important matter at least, though at great expense of life and treasure. She has tested many climates by means of her army. Her published health and death rolls have established the extreme unhealthfulness of Gibraltar, of the islands and shores of the Mediterranean, of the Black Sea, of India, China, the valley of the Nile, the West Indies, Central America, and Demarara, Canada, Australia, and her own foggy shores have given the best returns of salubrity as shown in England's army reports—a sad record at best.

The Kirghees steppes, near the Caspian Sea, though below the sea level, owing to its extreme dry air, has been observed, as in the valley of the Nile, to be favorable for tuberculous disease.

In the elevated plains of Persia and Armenia, at elevations of from six to seven thousand feet, phthisis is much benefited.

In the Alps, at St. Moritz on the river Inn, in the valley of the Upper Engadine are spas and winter cures, where some happy results have been experienced, despite harsh air and inclemency. Davos at an elevation of 5,200 feet has, of late, been much lauded as a health resort for consumptives.

The elevated plateau of Anahuac, in Mexico, has borne for several centuries a reputation for salubrity. The plain of Quito, though directly under the equator, at an elevation of 9,000 feet, has a well-established claim for general healthfulness, as have Montana and Potosi, at still greater elevations.

New Mexico, with its clear, dry air, affords a great contrast to many mountain regions, particularly to the Alps. These, placed between near and sharply-contrasted seas, the superheated Mediterranean, the fierce, cold Baltic, and the stormswept Atlantic, have ever been the cradle of storms and climatic excess. The mountain tops are eternally capped with snow and glaciers; their low valleys are hotbeds of miasm and dampness, where consumption and cretinism prevail.

The cold sides of the Alps are to-day, however, lined with hotels and pensions for invalids, who try to imagine themselves benefited by gazing on ice-clad peaks and mountain torrents.

There is this to proclaim, and it is of higher importance than the story of lands of matchless fertility, or of hills seamed through with precious metals, in the Rocky Mountains there is an area of 1,000 miles by 300, with a climate the most serene and invigorating of all that have been tested or in any proper sense demonstrated.

In pursuing my investigations on this subject the fact has been developed that one of the earliest and most intelligent advocates of a national sanitarium was Dr. W. Thornton Parker, of Beverly, Mass. Dr. Parker was for a considerable period a United States army surgeon at White Earth Indian Reservation, Minn., and subsequently was stationed in Texas, New Mexico, and the Indian Territory. Dr. Parker made a special study of lung diseases and climatology and has written much on the subject, both for the newspaper press and magazines, an article from his pen appearing in Treat's Manual for 1891. At the Ninth International Medical Congress Dr. Parker read a paper in which he said:

> If there be any class of sufferers who have endured more from many physicians, that class comes under the head of consumptives. Dragged about the world from the ice mountains of Switzerland to the swamps o f Florida dosed with nauseating cod-liver oil and countless medicines more or less debilitating, tormented with the outrageous Bergen's method, then hoping that oxygen inhalation would be the thing; shut up in cabinets, nearly baked to death in ovens; surely the record is a pitiful one.

This physician scouts the Koch method as only another installment of torture and delusive hope for the consumptive, and urges as a substitute for all of these things the "climate cure," which,

he asserts, can be found in the great plains of Colorado and New Mexico. There, he says, can be found "pure and life-giving sunshine, the rational cure for consumption."

Dr. Parker points out the fact that England has given this method of cure a fair trial with satisfactory results. The Government, some years ago, located for this purpose a consumptive's hospital at St. Lawrence, Isle of Wight. The hospital is built on the separate-cottage plan, no communication existing between the houses except by a subway running from end to end, by which each house is supplied direct from the kitchen. After citing the methods practiced at this retreat and commenting upon their beneficial results to this class of patients, Dr. Parker urges upon the United States Government the propriety of establishing a national sanitarium in our great Western health section.

With the mass of testimony above given little need be added to show the desirability of the legislation proposed. It matters little whether or not consumption is contagious—a view firmly held by a large majority of educated American physicians—the startling fact remains that it is a fearful destroyer of human life. Whether the disease is always hereditary, or whether the bacteria of tuberculosis, the identity of which the microscope of the medical scientist has established, can be communicated from patient to attendant, consumption is a tremendous fact, and the Government can well afford to make a liberal outlay to lessen its ravages and stay its deadly work.

With a death rate of 25 per cent in New England from this disease, of 20 per cent in the Middle States and at the capital of the nation, and a gradual reduction until it reaches 3 per cent in New Mexico, it surely is the dictate of wisdom for the Government to lend its aid in the beneficent work contemplated by the legislation under consideration. Private individuals have done much and will do more, but private means are not sufficient to accomplish the best results. The aid of the National Government, intelligently administered and economically used, will inspire the heart and nerve the arm of those now engaged in this blessed work, and from all over our land, from the homes of despondency and distress, prayers of thanksgiving will be offered for help that may save life and restore to robust manhood and womanhood those who are now battling with inherited disease under adverse and unequal conditions.

After all, the highest and noblest purposes of government are to secure the happiness and prosperity of the people, and surely no legislation can be thought of that promises so much for the well-being of a large class of our citizens as that for which I plead. All over our land the Macedonian cry is heard, and with anxious heart and earnest hope the stricken ones plead for national sympathy and national help. Surely that cry will not go unheeded; surely that help will not be withheld.

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